

IN THE SPECIFICATION

Please replace the paragraph beginning at page 17, line 11, with the following rewritten paragraph:

It is a drawing showing the results of western blotting with an anti-porcine IFN- γ antibody to a porcine IFN- γ intracellularly accumulated and produced through genetic recombination using *Brevibacillus choshinensis* HPD31 and *Brevibacillus choshinensis* HPD31-SP3 as a host, and it is a drawing showing the intracellular accumulation production and degradation of the porcine ~~H-1 γ~~ IFN- γ . The lane 1 indicates a genetic recombinant *Brevibacillus choshinensis* HPD31/pNY301; the lane 2 indicates a genetic recombinant *Brevibacillus choshinensis* HPD31/pNY301-~~pINF- γ~~ pIFN- γ ; and the lane 3 indicates a genetic recombinant *Brevibacillus choshinensis* HPD31-SP3/pNY301-pIFN- γ .

Please replace the paragraph beginning at page 21, line 16, with the following rewritten paragraph:

(4) *Brevibacillus choshinensis* of ~~claim 3~~ (3), wherein the sporulation-associated gene *hos* has a base sequence of SEQ ID NO:1.

Please replace the paragraph beginning at page 22, line 17, with the following rewritten paragraph:

(8) *Brevibacillus choshinensis* of ~~claim 7~~ (7), wherein the extracellular major protease gene *emp* has a base sequence of SEQ ID NO:3.

Please replace the paragraph beginning at page 33, penultimate line, with the following rewritten paragraph:

(a) Morphology:

size of cell:

liquid medium: 0.4 to 0.6 × 1.5 to 4 μm,

form of ~~spore~~ cell: bacillus,

presence or absence of spore: absence,

presence or absence of polymorphism of cell: absence,

presence or absence of mobility: presence (peripheric flagellum),

Please replace the paragraph beginning at page 34, line 7, with the following rewritten paragraph:

(b) Physiological properties:

reduction of nitrate:	-,
VP test (acetoin formation):	-,
indole formation:	-,
hydrogen sulfide formation (TSI agar medium):	+
utilization of citric acid:	+,
utilization of inorganic nitrogen source:	[[⁺]] ±
nitrate:	-,
ammonium salt:	+,
dye formation (King medium):	-
urease:	-,
oxidase:	+,
catalase:	+,
O-F test:	not decomposed,
gelatin decomposition:	-,
formation of acid from glucose:	-,

formation of acid from xylose: -,
formation of acid from lactose: -,
formation of acid from maltose: -,
pH for growth: 6 to 8.5,

(c) Other properties:

temperature resistance: die at 60°C,
extracellular protease activity: low or absent (note 1),
intracellular protease activity: low or absent (note 2).

Please replace the paragraph beginning at page 49, line 2, with the following rewritten paragraph:

The gene mutated on the genome of *Brevibacillus choshinensis* HPD31-SP1 was identified. The identification of the mutated gene was carried out as follows: A genome library of *Brevibacillus choshinensis* HPD31 was prepared, and each fragment of the genome library was introduced into ~~SP1~~ *Brevibacillus choshinensis* HPD31-SP1 and the strains whose sporulation ability was restored were selected.

Please replace the paragraph beginning at page 66, line 11, with the following rewritten paragraph:

50 µg of the pure EMP preparation was subjected to SDS-PAGE using an acrylamide concentration of 10 %, and an EMP protein band-containing gel fraction was cut out. Next, according to the method in Current Protocols in Protein Science, 11.3 Digestion of Proteins in Gel for Sequence Analysis, John Wiley & Sons, 1995, the EMP was subjected to in-gel enzyme treatment with 1 µg of trypsin for limited digestion thereof in gel. Next, the peptide fragment of the trypsin-processed EMP was recovered in an acetonitrile solution, and then

subjected to reversed-phase column chromatography with Mightysil RP18 Aqua ~~PR18~~ (Kanto Kagaku Co.), in which the peptide fragment of EMP was eluted and separated with a linear concentration gradient of 0 to 60 % acetonitrile containing 0.05 % TFA. Then, the thus eluted and separated EMP peptide fragment was dried to solidness, and one peptide fragment was subjected to amino acid sequence analysis with an ABI protein sequencer Model 492. The amino acid sequence analysis confirmed the internal partial amino acid sequence comprising 10 amino acid residues of IlePheGlnThrGlnProThrGlyPheAsp.

Please replace the paragraph beginning at page 85, last line, with the following rewritten paragraph:

As in Table 9, the amount of porcine IL-1 β in the culture produced by the use of Brevibacillus choshinensis HPD31-SP3 as a host increased to at least about 2.5 times as compared with that in the culture produced by the use of Brevibacillus choshinensis ~~HPD31-~~ ~~SS~~ HPD31 as a host.

Please replace the paragraph beginning at page 99, line 7, with the following rewritten paragraph:

Example 24 and Example 25 show the following: When the Brevibacillus choshinensis HPD31-SP3 of the invention was used as a host in recombinant protein production, then the accumulated amount of the protein increased as compared with the case where Brevibacillus choshinensis HPD3 was used as a host. It is understood that these results were brought about because the degradation of the intracellularly-accumulated recombinant protein was suppressed significantly owing to the inactivation of the intracellular protease gene imp.

Docket No. 288727US0PCT
Supplemental Preliminary Amendment

Please delete the Abstract

Page 104, after the last line, beginning on a new page, please insert the attached
Substitute Abstract.